BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work: Restoration and Improvements of roads from Doddaballapura main road to Nagarjuna collage, Kaveri layout, Chowdappa layout, Maruthinagara, Hariraja layout and surrounding areas in ward no -03 of Yelahanka New town Sub division (PACKAGE NO-12)

YELAHANKA DIVISION

NAME OF THE AGENCY : HANUMAPPAREDDY SRINIVASA REDDY

JOB CODE : 003-22-000006

MEASURMENT BOOK

PAYMENT CERTIFICATE
2nd & Part Bill

BRUHAT BANGALORE MAHANAGARA PALIKE

SUMMARY SHEET

Name of Work: Restoration and Improvements of roads from Doddaballapura main road to Nagarjuna collage, Kaveri layout, Chowdappa layout, Maruthinagara, Hariraja layout and surrounding areas in ward no -03 of Yelahanka New town Sub division (PACKAGE NO-12)

Contractor: HANUMAPPAREDDY SRINIVASA REDDY

Bill NO 2nd & Part Bill

Item No	Description of the item	Schedule-B			Claimed upto previous bill		Claimed in this bill		Total Claim upto this bill	
		Unit	Qty	Rate	Quantity	Amount(Rs)	Quantity	Amount(Rs)	Quantity	Amount(Rs)
1	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead	cum	5008.80	64.58	0.00	0.00	3626.07	234172.00	3626.07	234172.00
2	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications.(I No-19.64,P No-147)	Sqm	16696.00	6.42	0.00	0.00	9065.19	58199.00	9065.19	58199.00
3	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications	cum	2504.40	2014.87	0.00	0.00	1359.78	2739776.00	1359.78	2739776.00
4	KSRRB M600-1 Providing and Constructing dry lean cement concrete mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and 0.86cum and fine aggregate @0.58cum over a prepared sub-base,coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1.Aggregate gradation after blending to be as per Table 600-1,optimum moisture content to be determind during trial length construction,concrete strength not be determinde during trial length construction, concrete strength not to be less than 10Mpa at 7 days,mixed in a batching plant,transported to site,laid with a paver,compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specfications. Clause 601 of MORTH V Revision and IS 456 Table-5 , with OPC at 150	cum	656.78	4101.90	0.00	0.00		0.00	0.00	0.00
5	Constructing un-reinforced plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum,fine aggregates at 0.46 cum,coarse and fine aggregate conforming to IS:383-2016,with Superplastizer at 3 lts conforming to IS 9103-2008.mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design,laid in approved fixed side form work (steel channel,laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Speration the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a construction and longitudinal joints including groove cutting charges, finishes and curing membrane of impermiable plastic liquid of 125 micron, curalant primer, joint	Sqm	656.78	5690.65	0.00	0.00		0.00	0.00	0.00

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Item No	Description of the item	Schedule-B			Claimed upto previous bill		Claimed in this bill		Total Claim upto this bill	
		Unit	Qty	Rate	Quantity	Amount(Rs)	Quantity	Amount(Rs)	Quantity	Amount(Rs)
6	KSRB 4-1.6: Providing and laying in position Plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications.	Sqm	115.58	6089.85	65.67	399920.45		0.00	65.67	399920.00
7	KSRB 4-1.3 : Providing and laying in position plain cement concrete ofg Mix 1:4:8 with ope @180kgs, with 40mm and down size graded granite metal coarse aggregates@0.85 cum and fine aggregates @0.57 cum machine mixed , machine mixed, concrete laid in layers not exceeding 15cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per Specifications.	cum	991.05	5675.99	547.44	3107263.97		0.00	547.44	3107264.00
8	KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1 Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications.	Sqm	6735.85	217.43	3713.63	807454.57		0.00	3713.63	807455.00
9	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specifications. Wall and Bottom Thickness 15 cm.	Cum	1894.04	7497.22	918.71	6887770.99		0.00	918.71	6887771.00
10	KSRRB M 2200-6 Providing T.M.T steel reinforcement for R.C.C work including straightening, curing, bending, hooking, placing in position, lapping and or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. MORTH Specification No 1600 & 2200 TMT Bars Fe 500	Tonne	114.16	80948.07	63.00	5099728.41		0.00	63.00	5099728.00
11	Providing and Fixing pre cast covering Slab of 100mm thick made out of CC jelly 20mm and down size with steel reinforcement , including form work, lift charges, curing including cost of all materials ,Labour,Hire charges of machineries,loading onto transport and lift,Transportation etc., complete as per Engineer in-charge	Sqm	5337.00	1941.22	2955.24	5736770.99		0.00	2955.24	5736771.00

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Item No	Description of the item	Schedule-B			Claimed upto previous bill		Claimed in this bill		Total Claim upto this bill	
		Unit	Qty	Rate	Quantity	Amount(Rs)	Quantity	Amount(Rs)	Quantity	Amount(Rs)
12	Providing and fixing RCC precast cover slab of 230mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)	Sqm	67.20	4530.86	30.12	136469.50		0.00	30.12	136470.00
13	Providing and fixing pre cast solid cement concrete kerb stones made out of C.C 1:2:4 with top and bottom width 114 and 165 mm respectively , 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including form work, curing, including cost of all materials , labour,hire charges of machinery, loading, unloading, lead and lift, transportation ect., complete.	No	19940.74	436.80	7297.00	3187329.60		0.00	7297.00	3187330.00
14	KSRRB 800-1 Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 ,Specification No.KSRRB M800 - 6.P.No.180,I.No-24 1 of PW,P & IWTD SR 2018-19 ,	Sqm	2075.50	85.65	0.00	0.00		0.00	0.00	0.00
15	KSRRB M400-17 Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications (P.No.-155,I.No.-20.18)	Cum	2298.80	2021.29	0.00	0.00	1813.04	3664675.00	1813.04	3664675.00
16	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and sparying primer at the rte of 0.60 kg /sqm using mechanical means complete as per specifications .Clause 502 of MoRTH V th Revision (pg No.158 I.No-21.6), Issue Rate	Sqm	10499.50	34.26	0.00	0.00	9065.19	310573.00	9065.19	310573.00
17	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen (VG10) on the prepared black topped surfaces at 2.5 kg per 10sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of materials , labour, HOM complete as per specification	Sqm	27929.50	12.85	0.00	0.00	16043.50	206159.00	16043.50	206159.00

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Item No	Description of the item	Schedule-B			Claimed upto previous bill		Claimed in this bill		Total Claim upto this bill	
		Unit	Qty	Rate	Quantity	Amount(Rs)	Quantity	Amount(Rs)	Quantity	Amount(Rs)
18	KSRRB M500-17 Providing and laying Dense Graded Bituminous Macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with mechanical paver Gr-II (50mm to 75mm) with 4.5% VG-30 bitumen with all lead and lift and as per the direction of Engineer in-charge.I.No.-21.17.6,Pg No.- 160 ,Data Rate	cum	1396.48	7365.73	0.00	0.00	802.17	5908603.00	802.17	5908603.00
19	Providing and laying Bituminous concrete , using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision - using 40-60 TPH capacity HMP with mechanical paver grading II (30-40mm) with 5.4% of VG-30 bitumen	cum	1052.24	8534.82	0.00	0.00	641.74	5477134.00	641.74	5477134.00
20	KSRRB M800-13. Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface / Concrete Surface :- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications	Sqm	1298.20	459.29	0.00	0.00	755.25	346879.00	755.25	346879.00
21	KSRRB M800-35. Supply and Installtion of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS(Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No RW/ NH/33023/10-97 - DO III Dt 11.06. 1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 mm and height not less than 30 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road fo the shanks to go inside, without nails	No	1193.85	360.79	0.00	0.00	672.00	242451.00	672.00	242451.00
	Sub Total Amount				25362708.48		19188621.00		44551330.00	
	Add GST @ 12%				3043525.02		2302634.52		5346159.60	
	TOTAL AMOUNT				28406233.50		21491255.52		49897489.60	

Certificate

1 The above work has been Completed satisfactorily
2 The debris has been removed and disposed from the work spot.
3 No. departmental issues are made to the contractor

Asst Engineer,

Asst Executive Engineer

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BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA DIVISION

Name of Work: Restoration and Improvements of roads from Doddaballapura main road to Nagarjuna collage, Kaveri layout, Chowdappa layout, Maruthinagara, Hariraja layout and surrounding areas in ward no -03 of Yelahanka New town Sub division (PACKAGE NO-12)

Name of the Agency : HANUMAPPAREDDY SRINIVASA REDDY

2nd and Part Bill

Item No:	1	Measurement Sheet Recorded On : 29/6/22, 4/7/22, 8/7/22, 11/7/22

Item Name: KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead

SLNO	CHAINAGE Land Mark		NO	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	QTY	REMARKS
	IVF MAIN ROAD									
	FROM DODDABALLAPURA MAIN ROAD TO TEMPLE									
	For Road Widening (Edges)									
	0.00	4.50	2	4.50	2.00	1.50	1.75	0.40	6.30	
	4.50	30.00	2	25.50	1.50	1.60	1.55	0.40	31.62	
	30.00	60.00	2	30.00	1.60	1.40	1.50	0.40	36.00	
	60.00	90.00	2	30.00	1.40	1.70	1.55	0.40	37.20	
	90.00	120.00	2	30.00	1.70	1.60	1.65	0.40	39.60	
	120.00	150.00	2	30.00	1.60	1.70	1.65	0.40	39.60	
	150.00	180.00	2	30.00	1.70	1.50	1.60	0.40	38.40	
	180.00	210.00	2	30.00	1.50	1.60	1.55	0.40	37.20	
	210.00	240.00	2	30.00	1.60	1.70	1.65	0.40	39.60	
	240.00	270.00	2	30.00	1.70	1.80	1.75	0.40	42.00	
	270.00	300.00	2	30.00	1.80	1.60	1.70	0.40	40.80	
	300.00	330.00	2	30.00	1.60	1.70	1.65	0.40	39.60	
	330.00	360.00	2	30.00	1.70	1.80	1.75	0.40	42.00	
	360.00	390.00	2	30.00	1.80	1.60	1.70	0.40	40.80	
	390.00	420.00	2	30.00	1.60	1.50	1.55	0.40	37.20	
	420.00	450.00	2	30.00	1.50	1.40	1.45	0.40	34.80	
	450.00	480.00	2	30.00	1.40	1.60	1.50	0.40	36.00	
	480.00	510.00	2	30.00	1.60	1.70	1.65	0.40	39.60	
	510.00	540.00	2	30.00	1.70	1.60	1.65	0.40	39.60	
	540.00	570.00	2	30.00	1.60	1.70	1.65	0.40	39.60	
	570.00	600.00	2	30.00	1.70	1.80	1.75	0.40	42.00	
	600.00	630.00	2	30.00	1.80	1.60	1.70	0.40	40.80	
	630.00	660.00	2	30.00	1.60	1.50	1.55	0.40	37.20	
	660.00	690.00	2	30.00	1.50	1.40	1.45	0.40	34.80	
	690.00	720.00	2	30.00	1.40	1.80	1.60	0.40	38.40	
	720.00	750.00	2	30.00	1.80	1.70	1.75	0.40	42.00	
	750.00	780.00	2	30.00	1.70	1.60	1.65	0.40	39.60	
	780.00	810.00	2	30.00	1.60	1.50	1.55	0.40	37.20	

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	810.00	840.00	2	30.00	1.50	1.60	1.55	0.40	37.20	
	CONTINUITY ROAD									
	840.00	850.00	2	10.00	2.50	2.20	2.35	0.40	18.80	
	850.00	870.00	2	20.00	2.20	2.30	2.25	0.40	36.00	
	870.00	900.00	2	30.00	2.30	2.40	2.35	0.40	56.40	
	900.00	930.00	2	30.00	2.40	2.30	2.35	0.40	56.40	
	930.00	960.00	2	30.00	2.30	2.20	2.25	0.40	54.00	
	960.00	990.00	2	30.00	2.20	2.40	2.30	0.40	55.20	
	990.00	998.50	2	8.50	2.40	2.50	2.45	0.40	16.66	
	CONTINUITY ROAD									
	998.50	1010.50	2	12.00	1.50	1.80	1.65	0.40	15.84	
	1010.50	1028.50	2	18.00	1.80	1.70	1.75	0.40	25.20	
	1028.50	1058.50	2	30.00	1.70	1.50	1.60	0.40	38.40	
	CONTINUITY ROAD									
	1058.50	1088.50	2	30.00	2.50	2.40	2.45	0.40	58.80	
	1088.50	1118.50	2	30.00	2.40	2.50	2.45	0.40	58.80	
	1118.50	1148.50	2	30.00	2.50	2.50	2.50	0.40	60.00	
	1148.50	1178.50	2	30.00	2.50	2.80	2.65	0.40	63.60	
	1178.50	1208.50	2	30.00	2.80	2.60	2.70	0.40	64.80	
	1208.50	1227.50	2	19.00	2.60	2.70	2.65	0.40	40.28	
	CONTINUITY ROAD									
	1227.50	1257.50	2	30.00	2.40	2.30	2.35	0.40	56.40	
	1257.50	1287.50	2	30.00	2.30	2.40	2.35	0.40	56.40	
	1287.50	1312.50	2	25.00	2.40	2.50	2.45	0.40	49.00	
	CONTINUITY ROAD									
	1312.50	1327.50	2	15.00	2.40	2.10	2.25	0.40	27.00	
	1327.50	1350.00	2	22.50	2.10	2.20	2.15	0.40	38.70	
	1350.00	1351.00	0	1.00					0.00	NO WORK PEDESTRAIN
	1351.00	1372.50	2	21.50	1.40	1.50	1.45	0.40	24.94	
	1372.50	1402.50	2	30.00	1.50	1.20	1.35	0.40	32.40	
	1402.50	1435.00	2	32.50	1.20	1.10	1.15	0.40	29.90	
	1435.00	1462.50	2	27.50	3.00	2.80	2.90	0.40	63.80	
	1462.50	1492.50	2	30.00	2.80	2.60	2.70	0.40	64.80	
	1492.50	1522.50	2	30.00	2.60	2.50	2.55	0.40	61.20	
	1522.50	1552.50	2	30.00	2.50	2.60	2.55	0.40	61.20	
	1552.50	1582.50	2	30.00	2.60	2.40	2.50	0.40	60.00	
	1582.50	1612.50	2	30.00	2.40	2.70	2.55	0.40	61.20	
	1612.50	1642.50	2	30.00	2.70	2.50	2.60	0.40	62.40	
	1642.50	1672.50	2	30.00	2.50	2.60	2.55	0.40	61.20	
	1672.50	1702.50	2	30.00	2.60	2.70	2.65	0.40	63.60	
	1702.50	1732.50	2	30.00	2.70	2.80	2.75	0.40	66.00	
	1732.50	1743.00	2	10.50	2.80	2.60	2.70	0.40	22.68	UPTO TEMPLE
APPROACH	HOUSE NO 4 GATE		1	3.60	9.40	5.70	7.55	0.40	10.87	
	For Road Cut Portion									
			1	45.00	1.20	1.20	1.20	0.40	21.60	
			1	60.00	1.20	1.20	1.20	0.40	28.80	
			1	35.00	1.20	1.20	1.20	0.40	16.80	

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			1	40.00	1.20	1.20	1.20	0.40	19.20	
			1	45.00	1.20	1.20	1.20	0.40	21.60	
	KAVERY LAYOUT 3RD MAIN ROAD									
	FROM MAJOR SANDEEP UNNIKRISHNA ROAD (TOTAL SPIRITS) TO DEAD END									
	0.00	30.00	1	30.00	6.30	7.00	6.65	0.40	79.80	
	30.00	60.00	1	30.00	7.00	7.00	7.00	0.40	84.00	
	60.00	90.00	1	30.00	7.00	6.40	6.70	0.40	80.40	
	90.00	120.00	1	30.00	6.40	6.90	6.65	0.40	79.80	
	120.00	150.00	1	30.00	6.90	6.50	6.70	0.40	80.40	
	150.00	180.00	1	30.00	6.50	8.10	7.30	0.40	87.60	
	180.00	210.00	1	30.00	8.10	6.80	7.45	0.40	89.40	
	210.00	240.00	1	30.00	6.80	6.80	6.80	0.40	81.60	
	240.00	272.00	1	32.00	6.80	5.80	6.30	0.40	80.64	
DEDUCTION	MANHOLE		-9	0.64				0.40	-2.29	
DEDUCTION	E POLE		-5	0.30	0.30	0.30	0.30	0.40	-0.18	
DEDUCTION	RAMP		-1	8.00	0.30	0.30	0.30	0.40	-0.96	
DEDUCTION	TREE		-8	0.90	0.60	0.60	0.60	0.40	-1.73	
								Total Qty Work Done	3626.07	Cum
								Qty Payable in this bill	3626.07	Cum

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BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA DIVISION

Name of Work: Restoration and Improvements of roads from Doddaballapura main road to Nagarjuna collage, Kaveri layout, Chowdappa layout, Maruthinagara, Hariraja layout and surrounding areas in ward no -03 of Yelahanka New town Sub division (PACKAGE NO-12)

Name of the Agency : HANUMAPPAREDDY SRINIVASA REDDY

2nd and Part Bill

Item No:	2	Measurement Sheet Recorded On : 1/7/22

Item Name: KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications.(I No-19.64,P No-147)

SLNO	CHAINAGE Land Mark		NO	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	QTY	REMARKS
	IVF MAIN ROAD									
	FROM DODDABALLAPURA MAIN ROAD TO TEMPLE									
	For Road Widening (Edges)									
	0.00	4.50	2	4.50	2.00	1.50	1.75		15.75	
	4.50	30.00	2	25.50	1.50	1.60	1.55		79.05	
	30.00	60.00	2	30.00	1.60	1.40	1.50		90.00	
	60.00	90.00	2	30.00	1.40	1.70	1.55		93.00	
	90.00	120.00	2	30.00	1.70	1.60	1.65		99.00	
	120.00	150.00	2	30.00	1.60	1.70	1.65		99.00	
	150.00	180.00	2	30.00	1.70	1.50	1.60		96.00	
	180.00	210.00	2	30.00	1.50	1.60	1.55		93.00	
	210.00	240.00	2	30.00	1.60	1.70	1.65		99.00	
	240.00	270.00	2	30.00	1.70	1.80	1.75		105.00	
	270.00	300.00	2	30.00	1.80	1.60	1.70		102.00	
	300.00	330.00	2	30.00	1.60	1.70	1.65		99.00	
	330.00	360.00	2	30.00	1.70	1.80	1.75		105.00	
	360.00	390.00	2	30.00	1.80	1.60	1.70		102.00	
	390.00	420.00	2	30.00	1.60	1.50	1.55		93.00	
	420.00	450.00	2	30.00	1.50	1.40	1.45		87.00	
	450.00	480.00	2	30.00	1.40	1.60	1.50		90.00	
	480.00	510.00	2	30.00	1.60	1.70	1.65		99.00	
	510.00	540.00	2	30.00	1.70	1.60	1.65		99.00	
	540.00	570.00	2	30.00	1.60	1.70	1.65		99.00	
	570.00	600.00	2	30.00	1.70	1.80	1.75		105.00	
	600.00	630.00	2	30.00	1.80	1.60	1.70		102.00	
	630.00	660.00	2	30.00	1.60	1.50	1.55		93.00	
	660.00	690.00	2	30.00	1.50	1.40	1.45		87.00	
	690.00	720.00	2	30.00	1.40	1.80	1.60		96.00	
	720.00	750.00	2	30.00	1.80	1.70	1.75		105.00	
	750.00	780.00	2	30.00	1.70	1.60	1.65		99.00	
	780.00	810.00	2	30.00	1.60	1.50	1.55		93.00	

SAPIENCE CONSULTANTS ENGINEERS Bangalore

			1	40.00	1.20	1.20	1.20		48.00	
			1	45.00	1.20	1.20	1.20		54.00	
	KAVERY LAYOUT 3RD MAIN ROAD									
	FROM MAJOR SANDEEP UNNIKRISHNA ROAD (TOTAL SPIRITS) TO DEAD END									
	0.00	30.00	1	30.00	6.30	7.00	6.65		199.50	
	30.00	60.00	1	30.00	7.00	7.00	7.00		210.00	
	60.00	90.00	1	30.00	7.00	6.40	6.70		201.00	
	90.00	120.00	1	30.00	6.40	6.90	6.65		199.50	
	120.00	150.00	1	30.00	6.90	6.50	6.70		201.00	
	150.00	180.00	1	30.00	6.50	8.10	7.30		219.00	
	180.00	210.00	1	30.00	8.10	6.80	7.45		223.50	
	210.00	240.00	1	30.00	6.80	6.80	6.80		204.00	
	240.00	272.00	1	32.00	6.80	5.80	6.30		201.60	
DEDUCTION	MANHOLE		-9	0.64					-5.72	
DEDUCTION	E POLE		-5	0.30	0.30	0.30	0.30		-0.45	
DEDUCTION	RAMP		-1	8.00	0.30	0.30	0.30		-2.40	
DEDUCTION	TREE		-8	0.90	0.60	0.60	0.60		-4.32	
								Total Qty Work Done	9065.19	Sqm
								Qty Payable in this bill	9065.19	Sqm

SAPIENCE CONSULTANTS ENGINEERS * Bangalore-56

AE.

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA DIVISION

Name of Work: Restoration and Improvements of roads from Doddaballapura main road to Nagarjuna collage, Kaveri layout, Chowdappa layout, Maruthinagara, Hariraja layout and surrounding areas in ward no -03 of Yelahanka New town Sub division (PACKAGE NO-12)

Name of the Agency : HANUMAPPAREDDY SRINIVASA REDDY

2nd and Part Bill

Item No: 3 Measurement Sheet Recorded On : 30/6/22, 6/7/22, 12/7/22

Item Name: Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications

SLNO	CHAINAGE Land Mark		NO	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	QTY	REMARKS
	IVF MAIN ROAD									
	FROM DODDABALLAPURA MAIN ROAD TO TEMPLE									
	For Road Widening (Edges)									
	0.00	4.50	2	4.50	2.00	1.50	1.75	0.15	2.36	
	4.50	30.00	2	25.50	1.50	1.60	1.55	0.15	11.86	
	30.00	60.00	2	30.00	1.60	1.40	1.50	0.15	13.50	
	60.00	90.00	2	30.00	1.40	1.70	1.55	0.15	13.95	
	90.00	120.00	2	30.00	1.70	1.60	1.65	0.15	14.85	
	120.00	150.00	2	30.00	1.60	1.70	1.65	0.15	14.85	
	150.00	180.00	2	30.00	1.70	1.50	1.60	0.15	14.40	
	180.00	210.00	2	30.00	1.50	1.60	1.55	0.15	13.95	
	210.00	240.00	2	30.00	1.60	1.70	1.65	0.15	14.85	
	240.00	270.00	2	30.00	1.70	1.80	1.75	0.15	15.75	
	270.00	300.00	2	30.00	1.80	1.60	1.70	0.15	15.30	
	300.00	330.00	2	30.00	1.60	1.70	1.65	0.15	14.85	
	330.00	360.00	2	30.00	1.70	1.80	1.75	0.15	15.75	
	360.00	390.00	2	30.00	1.80	1.60	1.70	0.15	15.30	
	390.00	420.00	2	30.00	1.60	1.50	1.55	0.15	13.95	
	420.00	450.00	2	30.00	1.50	1.40	1.45	0.15	13.05	
	450.00	480.00	2	30.00	1.40	1.60	1.50	0.15	13.50	
	480.00	510.00	2	30.00	1.60	1.70	1.65	0.15	14.85	
	510.00	540.00	2	30.00	1.70	1.60	1.65	0.15	14.85	
	540.00	570.00	2	30.00	1.60	1.70	1.65	0.15	14.85	
	570.00	600.00	2	30.00	1.70	1.80	1.75	0.15	15.75	
	600.00	630.00	2	30.00	1.80	1.60	1.70	0.15	15.30	
	630.00	660.00	2	30.00	1.60	1.50	1.55	0.15	13.95	
	660.00	690.00	2	30.00	1.50	1.40	1.45	0.15	13.05	
	690.00	720.00	2	30.00	1.40	1.80	1.60	0.15	14.40	
	720.00	750.00	2	30.00	1.80	1.70	1.75	0.15	15.75	
	750.00	780.00	2	30.00	1.70	1.60	1.65	0.15	14.85	
	780.00	810.00	2	30.00	1.60	1.50	1.55	0.15	13.95	

SAPIENCE CONSULTANTS & ENGINEERS Bangalore-54

AE

			1	40.00	1.20	1.20	1.20	0.15	7.20	
			1	45.00	1.20	1.20	1.20	0.15	8.10	
	KAVERY LAYOUT 3RD MAIN ROAD									
	FROM MAJOR SANDEEP UNNIKRISHNA ROAD (TOTAL SPIRITS) TO DEAD END									
	0.00	30.00	1	30.00	6.30	7.00	6.65	0.15	29.93	
	30.00	60.00	1	30.00	7.00	7.00	7.00	0.15	31.50	
	60.00	90.00	1	30.00	7.00	6.40	6.70	0.15	30.15	
	90.00	120.00	1	30.00	6.40	6.90	6.65	0.15	29.93	
	120.00	150.00	1	30.00	6.90	6.50	6.70	0.15	30.15	
	150.00	180.00	1	30.00	6.50	8.10	7.30	0.15	32.85	
	180.00	210.00	1	30.00	8.10	6.80	7.45	0.15	33.53	
	210.00	240.00	1	30.00	6.80	6.80	6.80	0.15	30.60	
	240.00	272.00	1	32.00	6.80	5.80	6.30	0.15	30.24	
DEDUCTION	MANHOLE		-9	0.64				0.15	-0.86	
DEDUCTION	E POLE		-5	0.30	0.30	0.30	0.30	0.15	-0.07	
DEDUCTION	RAMP		-1	8.00	0.30	0.30	0.30	0.15	-0.36	
DEDUCTION	TREE		-8	0.90	0.60	0.60	0.60	0.15	-0.65	
								Total Qty Work Done	1359.78	Cum
								Qty Payable in this bill	1359.78	Cum

SAPIENCE CONSULTANTS ENGINEERS Bangalore-56

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA DIVISION

Name of Work: Restoration and Improvements of roads from Doddaballapura main road to Nagarjuna collage, Kaveri layout, Chowdappa layout, Maruthinagara, Hariraja layout and surrounding areas in ward no -03 of Yelahanka New town Sub division (PACKAGE NO-12)

Name of the Agency : HANUMAPPAREDDY SRINIVASA REDDY

2nd and Part Bill

Item No: 15 Measurement Sheet Recorded On : 4/7/22, 7/7/22, 11/7/22, 14/7/22

Item Name: KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications (P.No.-155,I.No.-20.18)

SLNO	CHAINAGE Land Mark		NO	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	QTY	REMARKS
	IVF MAIN ROAD									
	FROM DODDABALLAPURA MAIN ROAD TO TEMPLE									
	For Road Widening (Edges)									
	0.00	4.50	2	4.50	2.00	1.50	1.75	0.20	3.15	
	4.50	30.00	2	25.50	1.50	1.60	1.55	0.20	15.81	
	30.00	60.00	2	30.00	1.60	1.40	1.50	0.20	18.00	
	60.00	90.00	2	30.00	1.40	1.70	1.55	0.20	18.60	
	90.00	120.00	2	30.00	1.70	1.60	1.65	0.20	19.80	
	120.00	150.00	2	30.00	1.60	1.70	1.65	0.20	19.80	
	150.00	180.00	2	30.00	1.70	1.50	1.60	0.20	19.20	
	180.00	210.00	2	30.00	1.50	1.60	1.55	0.20	18.60	
	210.00	240.00	2	30.00	1.60	1.70	1.65	0.20	19.80	
	240.00	270.00	2	30.00	1.70	1.80	1.75	0.20	21.00	
	270.00	300.00	2	30.00	1.80	1.60	1.70	0.20	20.40	
	300.00	330.00	2	30.00	1.60	1.70	1.65	0.20	19.80	
	330.00	360.00	2	30.00	1.70	1.80	1.75	0.20	21.00	
	360.00	390.00	2	30.00	1.80	1.60	1.70	0.20	20.40	
	390.00	420.00	2	30.00	1.60	1.50	1.55	0.20	18.60	
	420.00	450.00	2	30.00	1.50	1.40	1.45	0.20	17.40	
	450.00	480.00	2	30.00	1.40	1.60	1.50	0.20	18.00	
	480.00	510.00	2	30.00	1.60	1.70	1.65	0.20	19.80	
	510.00	540.00	2	30.00	1.70	1.60	1.65	0.20	19.80	
	540.00	570.00	2	30.00	1.60	1.70	1.65	0.20	19.80	
	570.00	600.00	2	30.00	1.70	1.80	1.75	0.20	21.00	
	600.00	630.00	2	30.00	1.80	1.60	1.70	0.20	20.40	
	630.00	660.00	2	30.00	1.60	1.50	1.55	0.20	18.60	
	660.00	690.00	2	30.00	1.50	1.40	1.45	0.20	17.40	
	690.00	720.00	2	30.00	1.40	1.80	1.60	0.20	19.20	
	720.00	750.00	2	30.00	1.80	1.70	1.75	0.20	21.00	
	750.00	780.00	2	30.00	1.70	1.60	1.65	0.20	19.80	
	780.00	810.00	2	30.00	1.60	1.50	1.55	0.20	18.60	

SAPIENCE CONSULTANTS & ENGINEERS * Bangalore-59

			1	40.00	1.20	1.20	1.20	0.20	9.60	
			1	45.00	1.20	1.20	1.20	0.20	10.80	
	KAVERY LAYOUT 3RD MAIN ROAD									
	FROM MAJOR SANDEEP UNNIKRISHNA ROAD (TOTAL SPIRITS) TO DEAD END									
	0.00	30.00	1	30.00	6.30	7.00	6.65	0.20	39.90	
	30.00	60.00	1	30.00	7.00	7.00	7.00	0.20	42.00	
	60.00	90.00	1	30.00	7.00	6.40	6.70	0.20	40.20	
	90.00	120.00	1	30.00	6.40	6.90	6.65	0.20	39.90	
	120.00	150.00	1	30.00	6.90	6.50	6.70	0.20	40.20	
	150.00	180.00	1	30.00	6.50	8.10	7.30	0.20	43.80	
	180.00	210.00	1	30.00	8.10	6.80	7.45	0.20	44.70	
	210.00	240.00	1	30.00	6.80	6.80	6.80	0.20	40.80	
	240.00	272.00	1	32.00	6.80	5.80	6.30	0.20	40.32	
DEDUCTION	MANHOLE		-9	0.64				0.20	-1.14	
DEDUCTION	E POLE		-5	0.30	0.30	0.30	0.30	0.20	-0.09	
DEDUCTION	RAMP		-1	8.00	0.30	0.30	0.30	0.20	-0.48	
DEDUCTION	TREE		-8	0.90	0.60	0.60	0.60	0.20	-0.86	
								Total Qty Work Done	1813.04	Cum
								Qty Payable in this bill	1813.04	Cum

SAPIENCE CONSULTANTS ENGINEERS Bangalore-560

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA DIVISION

Name of Work: Restoration and Improvements of roads from Doddaballapura main road to Nagarjuna collage, Kaveri layout, Chowdappa layout, Maruthinagara, Hariraja layout and surrounding areas in ward no -03 of Yelahanka New town Sub division (PACKAGE NO-12)

Name of the Agency : HANUMAPPAREDDY SRINIVASA REDDY

2nd and Part Bill

Item No: 16 Measurement Sheet Recorded On : 18/7/22.

Item Name: KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and sparying primer at the rte of 0.60 kg /sqm using mechanical means complete as per specifications .Clause 502 of MoRTH V th Revision (pg No.158 I.No-21.6), Issue Rate

SLNO	CHAINAGE Land Mark		NO	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	QTY	REMARKS
	IVF MAIN ROAD									
	FROM DODDABALLAPURA MAIN ROAD TO TEMPLE									
	For Road Widening (Edges)									
	0.00	4.50	2	4.50	2.00	1.50	1.75		15.75	
	4.50	30.00	2	25.50	1.50	1.60	1.55		79.05	
	30.00	60.00	2	30.00	1.60	1.40	1.50		90.00	
	60.00	90.00	2	30.00	1.40	1.70	1.55		93.00	
	90.00	120.00	2	30.00	1.70	1.60	1.65		99.00	
	120.00	150.00	2	30.00	1.60	1.70	1.65		99.00	
	150.00	180.00	2	30.00	1.70	1.50	1.60		96.00	
	180.00	210.00	2	30.00	1.50	1.60	1.55		93.00	
	210.00	240.00	2	30.00	1.60	1.70	1.65		99.00	
	240.00	270.00	2	30.00	1.70	1.80	1.75		105.00	
	270.00	300.00	2	30.00	1.80	1.60	1.70		102.00	
	300.00	330.00	2	30.00	1.60	1.70	1.65		99.00	
	330.00	360.00	2	30.00	1.70	1.80	1.75		105.00	
	360.00	390.00	2	30.00	1.80	1.60	1.70		102.00	
	390.00	420.00	2	30.00	1.60	1.50	1.55		93.00	
	420.00	450.00	2	30.00	1.50	1.40	1.45		87.00	
	450.00	480.00	2	30.00	1.40	1.60	1.50		90.00	
	480.00	510.00	2	30.00	1.60	1.70	1.65		99.00	
	510.00	540.00	2	30.00	1.70	1.60	1.65		99.00	
	540.00	570.00	2	30.00	1.60	1.70	1.65		99.00	
	570.00	600.00	2	30.00	1.70	1.80	1.75		105.00	
	600.00	630.00	2	30.00	1.80	1.60	1.70		102.00	
	630.00	660.00	2	30.00	1.60	1.50	1.55		93.00	
	660.00	690.00	2	30.00	1.50	1.40	1.45		87.00	
	690.00	720.00	2	30.00	1.40	1.80	1.60		96.00	
	720.00	750.00	2	30.00	1.80	1.70	1.75		105.00	
	750.00	780.00	2	30.00	1.70	1.60	1.65		99.00	
	780.00	810.00	2	30.00	1.60	1.50	1.55		93.00	

ENGINEERS & CONSULTANTS

			1	40.00	1.20	1.20	1.20		48.00	
			1	45.00	1.20	1.20	1.20		54.00	
	KAVERY LAYOUT 3RD MAIN ROAD									
	FROM MAJOR SANDEEP UNNIKRISHNA ROAD (TOTAL SPIRITS) TO DEAD END									
	0.00	30.00	1	30.00	6.30	7.00	6.65		199.50	
	30.00	60.00	1	30.00	7.00	7.00	7.00		210.00	
	60.00	90.00	1	30.00	7.00	6.40	6.70		201.00	
	90.00	120.00	1	30.00	6.40	6.90	6.65		199.50	
	120.00	150.00	1	30.00	6.90	6.50	6.70		201.00	
	150.00	180.00	1	30.00	6.50	8.10	7.30		219.00	
	180.00	210.00	1	30.00	8.10	6.80	7.45		223.50	
	210.00	240.00	1	30.00	6.80	6.80	6.80		204.00	
	240.00	272.00	1	32.00	6.80	5.80	6.30		201.60	
DEDUCTION	MANHOLE		-9	0.64					-5.72	
DEDUCTION	E POLE		-5	0.30	0.30	0.30	0.30		-0.45	
DEDUCTION	RAMP		-1	8.00	0.30	0.30	0.30		-2.40	
DEDUCTION	TREE		-8	0.90	0.60	0.60	0.60		-4.32	
								Total Qty Work Done	9065.19	Sqm
								Qty Payable in this bill	9065.19	Sqm

SAPIENCE ENGINEERS Bangalore-99

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BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA DIVISION

Name of Work: Restoration and Improvements of roads from Doddaballapura main road to Nagarjuna collage, Kaveri layout, Chowdappa layout, Maruthinagara, Hariraja layout and surrounding areas in ward no -03 of Yelahanka New town Sub division (PACKAGE NO-12)

Name of the Agency : HANUMAPPAREDDY SRINIVASA REDDY

2nd and Part Bill

Item No: 17 | Measurement Sheet Recorded On : 19/7/22 , 20/7/22

Item Name: KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen (VG10) on the prepared black topped surfaces at 2.5 kg per 10sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of materials , labour, HOM complete as per specification

SLNO	CHAINAGE Land Mark		NO	L (m)	B (m)	B1 (m)	Avg B (m)	Average Depth (m)	QTY	REMARKS
	IVF MAIN ROAD									
	FROM DODDABALLAPURA MAIN ROAD TO TEMPLE									
	0.00	4.50	1	4.50	13.50	7.60	10.55		47.48	
	4.50	30.00	1	25.50	7.60	6.00	6.80		173.40	
	30.00	60.00	1	30.00	6.00	6.20	6.10		183.00	
	60.00	90.00	1	30.00	6.20	6.20	6.20		186.00	
	90.00	120.00	1	30.00	6.20	6.30	6.25		187.50	
	120.00	150.00	1	30.00	6.30	6.20	6.25		187.50	
	150.00	180.00	1	30.00	6.20	6.10	6.15		184.50	
	180.00	210.00	1	30.00	6.10	6.00	6.05		181.50	
	210.00	240.00	1	30.00	6.00	6.40	6.20		186.00	
	240.00	270.00	1	30.00	6.40	6.20	6.30		189.00	
	270.00	300.00	1	30.00	6.20	6.10	6.15		184.50	
	300.00	330.00	1	30.00	6.10	6.40	6.25		187.50	
	330.00	360.00	1	30.00	6.40	7.30	6.85		205.50	
	360.00	390.00	1	30.00	7.30	7.10	7.20		216.00	
	390.00	420.00	1	30.00	7.10	6.80	6.95		208.50	
	420.00	450.00	1	30.00	6.80	6.70	6.75		202.50	
	450.00	480.00	1	30.00	6.70	6.70	6.70		201.00	
	480.00	510.00	1	30.00	6.70	6.50	6.60		198.00	
	510.00	540.00	1	30.00	6.50	6.60	6.55		196.50	
	540.00	570.00	1	30.00	6.60	6.40	6.50		195.00	
	570.00	600.00	1	30.00	6.40	6.20	6.30		189.00	
	600.00	630.00	1	30.00	6.20	7.80	7.00		210.00	
	630.00	660.00	1	30.00	7.80	7.40	7.60		228.00	
	660.00	690.00	1	30.00	7.40	7.00	7.20		216.00	
	690.00	720.00	1	30.00	7.00	8.40	7.70		231.00	
	720.00	750.00	1	30.00	8.40	8.30	8.35		250.50	
	750.00	780.00	1	30.00	8.30	8.30	8.30		249.00	
	780.00	810.00	1	30.00	8.30	8.20	8.25		247.50	
	810.00	840.00	1	30.00	8.20	9.20	8.70		261.00	

SAPIENCE CONSULTANTS & ENGINEERS * Bangalore-59

	KAVERY LAYOUT 3RD MAIN ROAD									
	FROM MAJOR SANDEEP UNNIKRISHNA ROAD (TOTAL SPIRITS) TO DEAD END									
	0.00	30.00	1	30.00	6.30	7.00	6.65		199.50	
	30.00	60.00	1	30.00	7.00	7.00	7.00		210.00	
	60.00	90.00	1	30.00	7.00	6.40	6.70		201.00	
	90.00	120.00	1	30.00	6.40	6.90	6.65		199.50	
	120.00	150.00	1	30.00	6.90	6.50	6.70		201.00	
	150.00	180.00	1	30.00	6.50	8.10	7.30		219.00	
	180.00	210.00	1	30.00	8.10	6.80	7.45		223.50	
	210.00	240.00	1	30.00	6.80	6.80	6.80		204.00	
	240.00	272.00	1	32.00	6.80	5.80	6.30		201.60	
DEDUCTION	MANHOLE		-9	0.64					-5.72	
DEDUCTION	E POLE		-5	0.30	0.30	0.30	0.30		-0.45	
DEDUCTION	RAMP		-1	8.00	0.30	0.30	0.30		-2.40	
DEDUCTION	TREE		-8	0.90	0.60	0.60	0.60		-4.32	
							Total Qty Work Done		16043.50	Sqm
							Qty Payable in this bill		16043.50	Sqm

SAVIENCE CONSULTANTS Bangalore-56 ENGINEERS

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA DIVISION

Name of Work: Restoration and Improvements of roads from Doddaballapura main road to Nagarjuna collage, Kaveri layout, Chowdappa layout, Maruthinagara, Hariraja layout and surrounding areas in ward no -03 of Yelahanka New town Sub division (PACKAGE NO-12)

Name of the Agency : HANUMAPPAREDDY SRINIVASA REDDY

2nd and Part Bill

Item No: 18 | Measurement Sheet Recorded On : 19/7/22 , 20/7/22

Item Name: KSRRB M500-17. Providing and laying Dense Graded Bituminous Macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with mechanical paver Gr-II (50mm to 75mm) with 4.5% VG-30 bitumen with all lead and lift and as per the direction of Engineer in-charge.I.No.-21.17.6,Pg No.- 160 ,Data Rate

SLNO	CHAINAGE Land Mark		NO	L (m)	B (m)	B1 (m)	Avg B (m)	Average Depth (m)	QTY	REMARKS
	IVF MAIN ROAD									
	FROM DODDABALLAPURA MAIN ROAD TO TEMPLE									
	0.00	4.50	1	4.50	13.50	7.60	10.55	0.05	2.37	
	4.50	30.00	1	25.50	7.60	6.00	6.80	0.05	8.67	
	30.00	60.00	1	30.00	6.00	6.20	6.10	0.05	9.15	
	60.00	90.00	1	30.00	6.20	6.20	6.20	0.05	9.30	
	90.00	120.00	1	30.00	6.20	6.30	6.25	0.05	9.38	
	120.00	150.00	1	30.00	6.30	6.20	6.25	0.05	9.38	
	150.00	180.00	1	30.00	6.20	6.10	6.15	0.05	9.23	
	180.00	210.00	1	30.00	6.10	6.00	6.05	0.05	9.08	
	210.00	240.00	1	30.00	6.00	6.40	6.20	0.05	9.30	
	240.00	270.00	1	30.00	6.40	6.20	6.30	0.05	9.45	
	270.00	300.00	1	30.00	6.20	6.10	6.15	0.05	9.23	
	300.00	330.00	1	30.00	6.10	6.40	6.25	0.05	9.38	
	330.00	360.00	1	30.00	6.40	7.30	6.85	0.05	10.28	
	360.00	390.00	1	30.00	7.30	7.10	7.20	0.05	10.80	
	390.00	420.00	1	30.00	7.10	6.80	6.95	0.05	10.43	
	420.00	450.00	1	30.00	6.80	6.70	6.75	0.05	10.13	
	450.00	480.00	1	30.00	6.70	6.70	6.70	0.05	10.05	
	480.00	510.00	1	30.00	6.70	6.50	6.60	0.05	9.90	
	510.00	540.00	1	30.00	6.50	6.60	6.55	0.05	9.83	
	540.00	570.00	1	30.00	6.60	6.40	6.50	0.05	9.75	
	570.00	600.00	1	30.00	6.40	6.20	6.30	0.05	9.45	
	600.00	630.00	1	30.00	6.20	7.80	7.00	0.05	10.50	
	630.00	660.00	1	30.00	7.80	7.40	7.60	0.05	11.40	
	660.00	690.00	1	30.00	7.40	7.00	7.20	0.05	10.80	
	690.00	720.00	1	30.00	7.00	8.40	7.70	0.05	11.55	
	720.00	750.00	1	30.00	8.40	8.30	8.35	0.05	12.53	
	750.00	780.00	1	30.00	8.30	8.30	8.30	0.05	12.45	

SAPIENCE CONSULTANTS & ENGINEERS Bangalore

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APPROACH	HOUSE NO 4 GATE		1	3.60	9.40	5.70	7.55	0.05	1.36	
	KAVERY LAYOUT 3RD MAIN ROAD									
	FROM MAJOR SANDEEP UNNIKRISHNA ROAD (TOTAL SPIRITS) TO DEAD END									
	0.00	30.00	1	30.00	6.30	7.00	6.65	0.05	9.98	
	30.00	60.00	1	30.00	7.00	7.00	7.00	0.05	10.50	
	60.00	90.00	1	30.00	7.00	6.40	6.70	0.05	10.05	
	90.00	120.00	1	30.00	6.40	6.90	6.65	0.05	9.98	
	120.00	150.00	1	30.00	6.90	6.50	6.70	0.05	10.05	
	150.00	180.00	1	30.00	6.50	8.10	7.30	0.05	10.95	
	180.00	210.00	1	30.00	8.10	6.80	7.45	0.05	11.18	
	210.00	240.00	1	30.00	6.80	6.80	6.80	0.05	10.20	
	240.00	272.00	1	32.00	6.80	5.80	6.30	0.05	10.08	
DEDUCTION	MANHOLE		-9	0.64				0.05	-0.29	
DEDUCTION	E POLE		-5	0.30	0.30	0.30	0.30	0.05	-0.02	
DEDUCTION	RAMP		-1	8.00	0.30	0.30	0.30	0.05	-0.12	
DEDUCTION	TREE		-8	0.90	0.60	0.60	0.60	0.05	-0.22	
							Total Qty Work Done		802.17	Cum
							Qty Payable in this bill		802.17	Cum

SAPIENCE CONSULTANTS & ENGINEERS * Bangalore-93

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA DIVISION

Name of Work: Restoration and Improvements of roads from Doddaballapura main road to Nagarjuna collage, Kaveri layout, Chowdappa layout, Maruthinagara, Hariraja layout and surrounding areas in ward no -03 of Yelahanka New town Sub division (PACKAGE NO-12)

Name of the Agency : HANUMAPPAREDDY SRINIVASA REDDY

2nd and Part Bill

Item No: 19 Measurement Sheet Recorded On : 21/7/22 , 22/7/22

Item Name: Providing and laying Bituminous concrete , using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision - using 40-60 TPH capacity HMP with mechanical paver grading II (30-40mm) with 5.4% of VG-30 bitumen .

SLNO	CHAINAGE Land Mark		NO	L (m)	B (m)	B1 (m)	Avg B (m)	Average Depth (m)	QTY	REMARKS
	IVF MAIN ROAD									
	FROM DODDABALLAPURA MAIN ROAD TO TEMPLE									
	0.00	4.50	1	4.50	13.50	7.60	10.55	0.04	1.90	
	4.50	30.00	1	25.50	7.60	6.00	6.80	0.04	6.94	
	30.00	60.00	1	30.00	6.00	6.20	6.10	0.04	7.32	
	60.00	90.00	1	30.00	6.20	6.20	6.20	0.04	7.44	
	90.00	120.00	1	30.00	6.20	6.30	6.25	0.04	7.50	
	120.00	150.00	1	30.00	6.30	6.20	6.25	0.04	7.50	
	150.00	180.00	1	30.00	6.20	6.10	6.15	0.04	7.38	
	180.00	210.00	1	30.00	6.10	6.00	6.05	0.04	7.26	
	210.00	240.00	1	30.00	6.00	6.40	6.20	0.04	7.44	
	240.00	270.00	1	30.00	6.40	6.20	6.30	0.04	7.56	
	270.00	300.00	1	30.00	6.20	6.10	6.15	0.04	7.38	
	300.00	330.00	1	30.00	6.10	6.40	6.25	0.04	7.50	
	330.00	360.00	1	30.00	6.40	7.30	6.85	0.04	8.22	
	360.00	390.00	1	30.00	7.30	7.10	7.20	0.04	8.64	
	390.00	420.00	1	30.00	7.10	6.80	6.95	0.04	8.34	
	420.00	450.00	1	30.00	6.80	6.70	6.75	0.04	8.10	
	450.00	480.00	1	30.00	6.70	6.70	6.70	0.04	8.04	
	480.00	510.00	1	30.00	6.70	6.50	6.60	0.04	7.92	
	510.00	540.00	1	30.00	6.50	6.60	6.55	0.04	7.86	
	540.00	570.00	1	30.00	6.60	6.40	6.50	0.04	7.80	
	570.00	600.00	1	30.00	6.40	6.20	6.30	0.04	7.56	
	600.00	630.00	1	30.00	6.20	7.80	7.00	0.04	8.40	
	630.00	660.00	1	30.00	7.80	7.40	7.60	0.04	9.12	
	660.00	690.00	1	30.00	7.40	7.00	7.20	0.04	8.64	
	690.00	720.00	1	30.00	7.00	8.40	7.70	0.04	9.24	
	720.00	750.00	1	30.00	8.40	8.30	8.35	0.04	10.02	
	750.00	780.00	1	30.00	8.30	8.30	8.30	0.04	9.96	
	780.00	810.00	1	30.00	8.30	8.20	8.25	0.04	9.90	
	810.00	840.00	1	30.00	8.20	9.20	8.70	0.04	10.44	

	CONTINUITY ROAD									
	840.00	850.00	1	10.00	9.10	8.80	8.95	0.04	3.58	
	850.00	870.00	1	20.00	8.80	8.20	8.50	0.04	6.80	
	870.00	900.00	1	30.00	8.20	8.20	8.20	0.04	9.84	
	900.00	930.00	1	30.00	8.20	8.20	8.20	0.04	9.84	
	930.00	960.00	1	30.00	8.20	8.20	8.20	0.04	9.84	
	960.00	990.00	1	30.00	8.20	8.20	8.20	0.04	9.84	
	990.00	998.50	1	8.50	8.20	11.60	9.90	0.04	3.37	
	CONTINUITY ROAD									
	998.50	1010.50	1	12.00	6.50	9.10	7.80	0.04	3.74	
	1010.50	1028.50	1	18.00	9.10	7.70	8.40	0.04	6.05	
	1028.50	1058.50	1	30.00	7.70	7.80	7.75	0.04	9.30	
	CONTINUITY ROAD									
	1058.50	1088.50	1	30.00	15.00	10.40	12.70	0.04	15.24	
	1088.50	1118.50	1	30.00	10.40	10.40	10.40	0.04	12.48	
	1118.50	1148.50	1	30.00	10.40	10.80	10.60	0.04	12.72	
	1148.50	1178.50	1	30.00	10.80	10.40	10.60	0.04	12.72	
	1178.50	1208.50	1	30.00	10.40	10.70	10.55	0.04	12.66	
	1208.50	1227.50	1	19.00	10.70	9.80	10.25	0.04	7.79	
	CONTINUITY ROAD									
	1227.50	1257.50	1	30.00	9.50	9.30	9.40	0.04	11.28	
	1257.50	1287.50	1	30.00	9.30	10.00	9.65	0.04	11.58	
	1287.50	1312.50	1	25.00	10.00	8.00	9.00	0.04	9.00	
	CONTINUITY ROAD									
	1312.50	1327.50	1	15.00	11.70	6.70	9.20	0.04	5.52	
	1327.50	1350.00	1	22.50	6.70	5.20	5.95	0.04	5.36	
	1350.00	1351.00	1	1.00					0.00	NO WORK PEDESTRAIN
	1351.00	1372.50	1	21.50	5.20	5.30	5.25	0.04	4.52	
	1372.50	1402.50	1	30.00	5.30	6.60	5.95	0.04	7.14	
	1402.50	1435.00	1	32.50	6.60	7.60	7.10	0.04	9.23	
	1435.00	1462.50	1	27.50	12.50	9.30	10.90	0.04	11.99	
	1462.50	1492.50	1	30.00	9.30	8.50	8.90	0.04	10.68	
	1492.50	1522.50	1	30.00	8.50	8.00	8.25	0.04	9.90	
	1522.50	1552.50	1	30.00	8.00	9.20	8.60	0.04	10.32	
	1552.50	1582.50	1	30.00	9.20	9.90	9.55	0.04	11.46	
	1582.50	1612.50	1	30.00	9.90	10.70	10.30	0.04	12.36	
	1612.50	1642.50	1	30.00	10.70	11.40	11.05	0.04	13.26	
	1642.50	1672.50	1	30.00	11.40	12.10	11.75	0.04	14.10	
	1672.50	1702.50	1	30.00	12.10	12.70	12.40	0.04	14.88	
	1702.50	1732.50	1	30.00	12.70	12.50	12.60	0.04	15.12	
	1732.50	1743.00	1	10.50	12.50	8.40	10.45	0.04	4.39	UPTO TEMPLE
DEDUCTION	CHAMBER		-2	0.90	0.90	0.90	0.90	0.04	-0.39	
DEDUCTION	MANHOLE		-24	0.64				0.04	-0.61	
DEDUCTION	TREE		-4	1.50	1.50	1.50	1.50	0.04	-0.36	
DEDUCTION	TREE		-1	2.50	2.50	2.50	2.50	0.04	-0.25	
DEDUCTION	E POLE		-9	0.30	0.30	0.30	0.30	0.04	-0.03	
DEDUCTION	PEDESTRAIN		-1	2.70	7.00	7.00	7.00	0.04	-0.76	
APPROACH	HOUSE NO 4 GATE		1	3.60	9.40	5.70	7.55	0.04	1.09	

SAPIENCE CONSULTANTS & ENGINEERS Bangalore-59

	KAVERY LAYOUT 3RD MAIN ROAD								
	FROM MAJOR SANDEEP UNNIKRISHNA ROAD (TOTAL SPIRITS) TO DEAD END								
	0.00	30.00	1	30.00	6.30	7.00	6.65	0.04	7.98	
	30.00	60.00	1	30.00	7.00	7.00	7.00	0.04	8.40	
	60.00	90.00	1	30.00	7.00	6.40	6.70	0.04	8.04	
	90.00	120.00	1	30.00	6.40	6.90	6.65	0.04	7.98	
	120.00	150.00	1	30.00	6.90	6.50	6.70	0.04	8.04	
	150.00	180.00	1	30.00	6.50	8.10	7.30	0.04	8.76	
	180.00	210.00	1	30.00	8.10	6.80	7.45	0.04	8.94	
	210.00	240.00	1	30.00	6.80	6.80	6.80	0.04	8.16	
	240.00	272.00	1	32.00	6.80	5.80	6.30	0.04	8.06	
DEDUCTION	MANHOLE		-9	0.64				0.04	-0.23	
DEDUCTION	E POLE		-5	0.30	0.30	0.30	0.30	0.04	-0.02	
DEDUCTION	RAMP		-1	8.00	0.30	0.30	0.30	0.04	-0.10	
DEDUCTION	TREE		-8	0.90	0.60	0.60	0.60	0.04	-0.17	
							Total Qty Work Done		641.74	Cum
							Qty Payable in this bill		641.74	Cum

SAPIENCE CONSULTANTS ENGINEERS Bangalore

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BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA DIVISION

Name of Work: Restoration and Improvements of roads from Doddaballapura main road to Nagarjuna collage, Kaveri layout, Chowdappa layout, Maruthinagara, Hariraja layout and surrounding areas in ward no -03 of Yelahanka New town Sub division (PACKAGE NO-12)

Name of the Agency : HANUMAPPAREDDY SRINIVASA REDDY

2nd and Part Bill

Item No: 20 | Measurement Sheet Recorded On : 30/7/22

Item Name: KSRRB M800-13. Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface / Concrete Surface :- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications

SLNO	CHAINAGE Land Mark		NO	L (m)	B (m)	B1 (m)	Avg B (m)	Average Depth (m)	QTY	REMARKS
	IVF MAIN ROAD									
	FROM DODDABALLAPURA MAIN ROAD TO TEMPLE									
	0.00	4.50	2.5	4.50			0.15		1.69	
	4.50	30.00	2.5	25.50			0.15		9.56	
	30.00	60.00	2.5	30.00			0.15		11.25	
	60.00	90.00	2.5	30.00			0.15		11.25	
	90.00	120.00	2.5	30.00			0.15		11.25	
	120.00	150.00	2.5	30.00			0.15		11.25	
	150.00	180.00	2.5	30.00			0.15		11.25	
	180.00	210.00	2.5	30.00			0.15		11.25	
	210.00	240.00	2.5	30.00			0.15		11.25	
	240.00	270.00	2.5	30.00			0.15		11.25	
	270.00	300.00	2.5	30.00			0.15		11.25	
	300.00	330.00	2.5	30.00			0.15		11.25	
	330.00	360.00	2.5	30.00			0.15		11.25	
	360.00	390.00	2.5	30.00			0.15		11.25	
	390.00	420.00	2.5	30.00			0.15		11.25	
	420.00	450.00	2.5	30.00			0.15		11.25	
	450.00	480.00	2.5	30.00			0.15		11.25	
	480.00	510.00	2.5	30.00			0.15		11.25	
	510.00	540.00	2.5	30.00			0.15		11.25	
	540.00	570.00	2.5	30.00			0.15		11.25	
	570.00	600.00	2.5	30.00			0.15		11.25	
	600.00	630.00	2.5	30.00			0.15		11.25	
	630.00	660.00	2.5	30.00			0.15		11.25	
	660.00	690.00	2.5	30.00			0.15		11.25	
	690.00	720.00	2.5	30.00			0.15		11.25	
	720.00	750.00	2.5	30.00			0.15		11.25	
	750.00	780.00	2.5	30.00			0.15		11.25	
	780.00	810.00	2.5	30.00			0.15		11.25	
	810.00	840.00	2.5	30.00			0.15		11.25	

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	150.00	180.00	2.5	30.00			0.15		11.25	
	180.00	210.00	2.5	30.00			0.15		11.25	
	210.00	240.00	2.5	30.00			0.15		11.25	
	240.00	272.00	2.5	32.00			0.15		12.00	
							Total Qty Work Done		755.25	Sqm
							Qty Payable in this bill		755.25	Sqm

SAFE ENGINEERING CONSULTANTS & ENGINEERS Bangalore-59

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BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA DIVISION

Name of Work: Restoration and Improvements of roads from Doddaballapura main road to Nagarjuna collage, Kaveri layout, Chowdappa layout, Maruthinagara, Hariraja layout and surrounding areas in ward no -03 of Yelahanka New town Sub division (PACKAGE NO-12)

Name of the Agency : HANUMAPPAREDDY SRINIVASA REDDY

2nd and Part Bill

Item No:	21	Measurement Sheet Recorded On : 1/8/22

Item Name: KSRRB M800-35. Supply and Installtion of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS(Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No RW/ NH/33023/10-97 - DO III Dt 11.06. 1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 mm and height not less than 30 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer

SLNO	CHAINAGE Land Mark		NO	L (m)	B (m)	B1 (m)	Avg B (m)	Average Depth (m)	QTY	REMARKS
	IVF MAIN ROAD									
	FROM DODDABALLAPURA MAIN ROAD TO TEMPLE									
	0.00	1743.00	2.0	1743.00	(2 X LENGTH/6)				581.00	
	KAVERY LAYOUT 3RD MAIN ROAD									
	FROM MAJOR SANDEEP UNNIKRISHNA ROAD (TOTAL SPIRITS) TO DEAD END									
	0.00	272.00	2.0	272.00	(2 X LENGTH/6)				91.00	
	Total Qty Work Done								672.00	No's
	Qty Payable in this bill								672.00	No's

SAPIENCE CONSULTANTS & ENGINEERS Bangalore-59

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